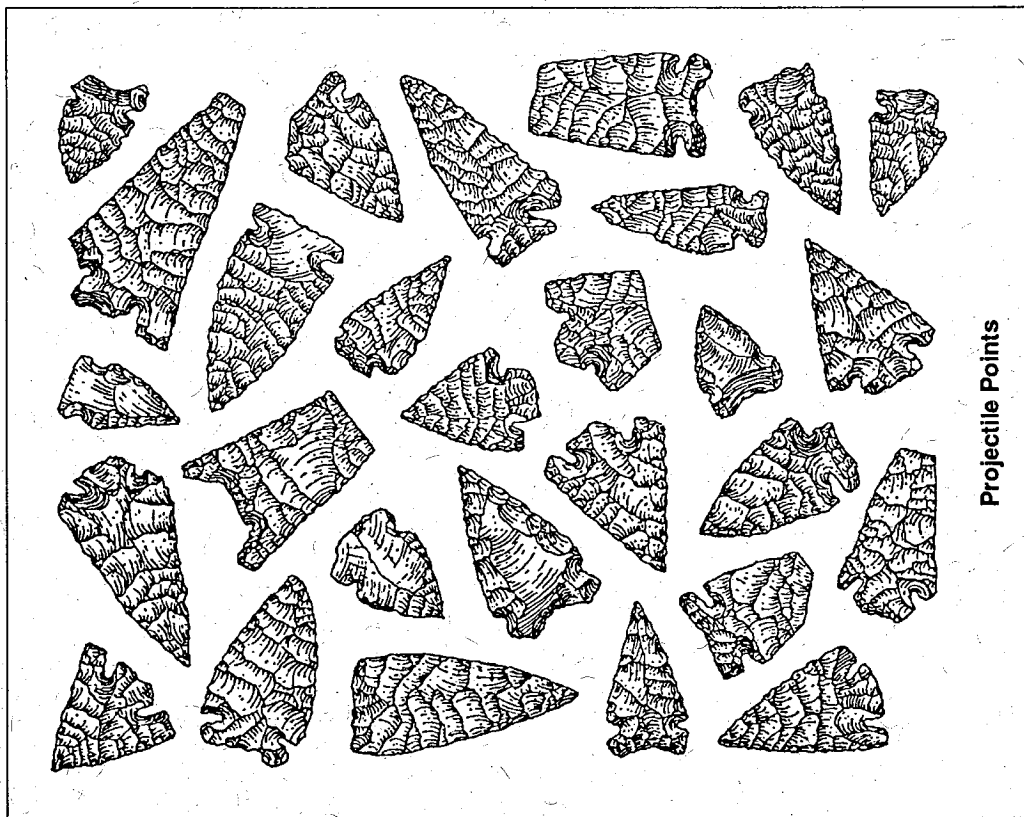


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Baker Caves

"A Look into the Past"



Projectile Points



ADVENTURES IN THE PAST
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Introduction

The Baker Caves consist of two lava features—a lava tube and a small lava blister—that were occupied approximately 1,000 years ago. Because of the caves' sheltered environment, they contain extensive evidence of everyday domestic activities in an excellent state of preservation. Scientific studies of the caves have provided further insight into the lives of the Native Americans who lived there 1,000 years ago.

Discovery

The caves were rediscovered in July 1985 by Mark Baker, whose family farms the land west of the parking area. Through a series of contacts with Richard Hanson, an archaeologist associated with UCLA who also farms near Minidoka; B. Robert Butler of the Museum of Natural History at Idaho State University in Pocatello; and John Lytle of the Shoshone District of the Bureau of Land Management, volunteers were organized to watch the cave and prevent vandalism. Dr. Mark Plew, of Boise State University, volunteered to help BLM conduct scientific studies at the caves. The excavation was done in August 1985 through a cooperative effort by BSU students, the BLM, the Herrett Museum, and the Idaho Archaeological Society.

Geology of the Wapi Lava Flow

The Wapi flow is relatively young, with a radiocarbon date of 2,270 years. The flow was produced by Pillar Butte, a low-shield volcano typical of similar lava sheets on the Snake River plain. It covers about 100 square miles and is made up of pahoehoe lava, with a small amount of AA lava near Split Butte. Both are Hawaiian terms. Pahoehoe lava has a smooth, billowy, or ropy surface, while AA has a rough, jagged, spiny, or clinkery surface.

The Wapi flow has lava toes at its edges, collapse depressions similar to the one that forms the southern edge of Baker Cave, flow ridges, and pressure ridges like the prominent one south of Baker Cave. The main portion of the flow has an average slope of less than one degree, with a steeper slope near Pillar Butte because of the accumulation of AA lava.

The elevation at the edge of the lava at Baker Cave parking lot is 4,397 feet, while the elevation at the top of Pillar Butte is 5,261

feet, for a total elevation gain of 864 feet. The lava itself, however, is considerably less than 200 feet deep in most places.

Background

Clovis Phase

Humans first occupied the Snake River plain during the "Clovis" or first phase of the Early Big Game Hunting period. This is evidenced by surface finds of the distinctive Clovis point and indications of human activity at Jaguar and Wilson Butte caves in the 10,000 to 9,000 BC time periods. In addition, the Simon site near Fairfield is a cache of large Clovis points and bifaces.

Folsom Phase

Evidence of "Folsom" occupation (the second phase of the Early Big Game Hunting period) in the Snake River plain consists of surface finds as well as deposits in Owl Cave near Idaho Falls. This site has four Folsom points associated with elephant, bison, and camel which have been dated at 8920 BC and are the oldest finds for this phase.

Plano Phase

The last phase of the Early Big Game Hunting period is the "Plano," which is the best represented early period in southern Idaho. Numerous projectile point styles were produced from 8600 BC to 5800 BC, when climatic changes forced an alteration in hunting patterns. One of the largest Plano sites in Idaho is at Owl Cave where, over widely separated time periods, two herds of Bison antiquus were lured into the cave, then killed and butchered. The Haskett site near American Falls, also representative of the Plano phase, is a cache of stemmed, lanceolate projectile points, but with little other evidence.

The Early Big Game Hunting period, also known as the Paleo Indian period ended around 6500 BC with a period of climatic change called the altithermal. This change resulted in a long period of drought throughout the West that severely affected the plants and animals that people depended upon for survival. Forced to adapt to a changing environment, these inhabitants began to restrict their foraging distances and concentrate in areas where survival was easier. The size of projectile points decreased through time from the relatively large Pinto and Bitterroot side-notched to the Elko side-notched projectile points.

With the introduction of the bow and arrow approximately 1,500

years ago, the final series of stone projectile points, the Rosegate and Desert side-notched arrowheads, appeared. Starting in the 1840s with the westward migration of Euro Americans, a few metal and glass arrowheads were made; but by that time, the majority of Native Americans had muskets and machine-made iron tools.

Numerous sites from these later periods have been found in southern Idaho. The upper levels of Wilson Butte Cave contained pottery dating from 1525 AD as well as Desert side-notched projectile points. The pottery in this region is usually a thick-walled grayware with no decoration. While most of the pottery was made by Shoshonean peoples, some appears to have been made by Fremont groups who were centered around the Great Salt Lake. Other sites having late-period components are Kelvins Cave south of Shoshone and Aviators Cave at the Idaho National Engineering Laboratory west of Idaho Falls.

The Archaeology of Baker Cave

There is evidence that the main chamber of Baker Cave III was occupied, at least for a short time, about 1,000 years ago. The occupants had apparently trapped a small bison herd consisting of at least 17 animals. They butchered the animals at the kill site and carried selected parts back to the cave. The most favored parts were the ribs, upper legs, and lower jaws. The jaw was probably saved because of the tongue, considered a delicacy by many. Based on the age of the bison and the developmental stage of a number of fetal bison found, the kill probably took place in midwinter.

In addition to the bison, a large number of rabbit remains were found in the cave, many with burned or butchered bones, indicating their inclusion in the diet. The remains of a dog were also in the cave; and, while other animals were present, their occurrence in the cave is probably due to natural causes.

Based on the size of the cave and what is known of Shoshonean bands, it is estimated

that between 10 and 25 people inhabited the cave. There is no way of knowing how long they stayed, but the consumption of 17 bison would have taken a fair amount of time if none of the meat was cached. It is also possible that the cave was used more than once.

There is evidence that numerous activities took place in the cave. Over a hundred arrowheads were found, most of them broken. This indicates that many arrows were repaired with new points after the bison kill. Over 20 arrow shaft abraders and smoothers were also found. These are rectangular pieces of pumice, or occasionally basalt, 2-1/2 to 3-1/2 inches long, used to make cane arrow shafts.

Cane fragments are the only evidence of vegetation that does not occur locally. A total of 58 knives and bifaces found in the cave were used for butchering bison. The thirty scrapers that were found would likely have been used for hide and wood preparation, while the nineteen drills were probably used to make clothing.

Also found in the cave were fragments of cordage made from twisted sagebrush bark, numerous beads made of bird bone, shell disks, bone rectangles that may have been used in games, several stone pipes, and two stone pendants. Twenty gray-colored pottery sherds indicated that at least one clay pot was broken in the cave.

Across the center of the cave the inhabitants had erected a rock wall running most of the length of the main chamber. Although the purpose of the wall is unknown, it may have been used to control airflow.

In front of the rock wall near the cave entrance was a work area where tools were manufac-



Scraper



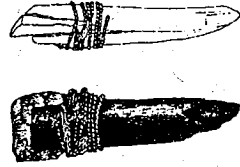
Drill



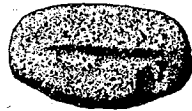
Twisted Cordage



Stone Pendant



Hafted Knives



Abrader



Bifacial Knife

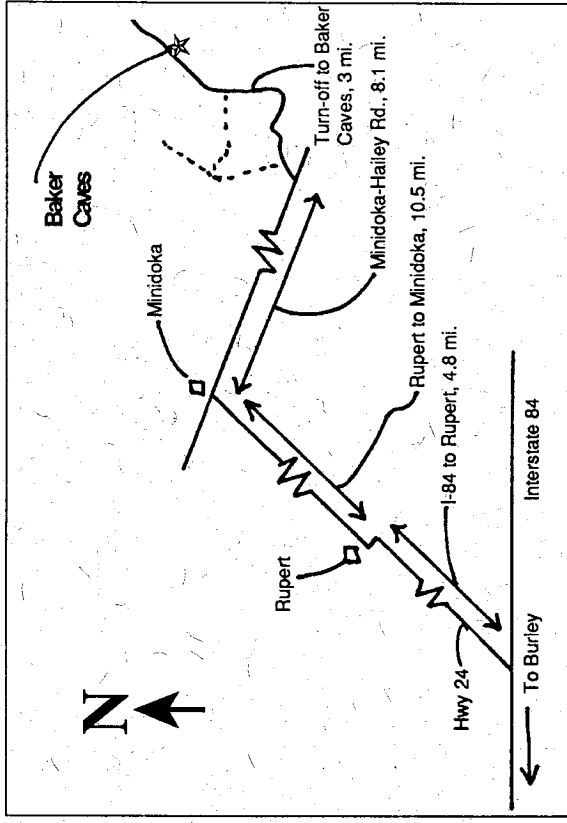
tured and repaired. While there were no large pieces of raw material, many flakes with the outer rind of an obsidian nodule were found, indicating the early stages of tool manufacture.

The stone used to make the tools was mostly clear or opaque obsidian. While the material has not been chemically analyzed, it is similar to obsidian sources north of Malad on Elkhorn Mountain, on Big Southern Butte, in the South Hills, and near American Falls. About 14 percent of the stone is various types of cherts from unknown sources. The general indication is that the inhabitants of the cave had spent time in eastern and southern Idaho before venturing on to the lava flow.

A second activity area beyond the stone wall consists of a dense scatter of bone, mainly bison, as well as juniper and sagebrush branches that were piled up to form sleeping mats. Three hearth areas, consisting of diffuse ash stains rather than constructed fire hearths, were located near the sleeping areas. Local juniper and sage were used as fuel.

In Baker Cave I, there is not enough room for the elaborate activities that took place in Baker Cave III because it measures only 20 feet wide, fifteen feet deep and five feet high. Its front was rocked up with a combination of large lava rocks and juniper logs. Such an enclosed chamber is uncommon and may have been used for social purposes by the occupants of Baker Cave III. The artifacts were very similar to those in the main chamber, with the addition of two "cloud blower" pipes made of stone. A possible hearth was located at the base of the wall near the center. It is speculated the smaller cave was occupied for a shorter period of time than the main cave.

The materials from the cave are curated for BLM at the Idaho Museum of Natural History located on the campus of Idaho State University. A traveling display describing the site and the excavation has been prepared by the Herrett Museum, with the assistance of a humanities grant and the BLM.



For More Information

Archaeological Investigations at Baker Caves I and III
A Late Archaic Component of the Eastern Snake River Plain
by Mark Plew

Handbook of North American Indians, Volume 11 Great Basin
by Warren L. D'Azevedo

Indians of Idaho
by Deward E. Walker Jr.

The Archaeology of Wilson Butte Cave South - Central Idaho
by Ruth Gruhn

Danger Cave
by Jesse D. Jennings

Basin - Plateau Aboriginal Sociopolitical Groups
by Julian Steward

A Guide to Understanding Idaho Archaeology
by B. Robert Butler